

1      REMARKS:

2  
3      The objections in the 7/14/2005 Office Action shall be  
4      addressed in order of their occurrence in that Office Action.

5  
6      The 7/14/2005 Office Action states "Claims 1-4 are  
7      rejected under 35 USC 103(a) as being unpatentable over  
8      Lagner et al 6,264,401 in view of Bertet et al 5,695,008."

9  
10     The 7/14/2005 Office Action states in part with respect  
11    to Langner et al.: "but (Langner) does not show the  
12    electrical conductor surrounded by a composite material with  
13    fibers of high strength embedded in a matrix material with  
14    glass fibers and the matrix material is selected from  
15    thermoset resins and thermoplastic resins, whereby said  
16    thermoset resins include epoxy and vinyl ester, and whereby  
17    said thermoplastic resins include PEEK, PEKK, and nylon."

18  
19     The 7/14/2005 Office Action further states in part:  
20    "Bertet shows a similar heated umbilical means with the  
21    electrical conductor surrounded by a composite material with  
22    fibers of high strength ...."

23  
24     The 7/14/2005 Office Action further states in part:  
25    "Therefore, it would have been obvious to one of ordinary  
26    skill in the art at the time the invention was made to modify  
27    Lagner, as taught by Bertet, to include glass fibers and  
28    resins in the electrical conductor to improve the heat  
29    transfer characteristics of the composite material to  
30    properly maintain flow for produced hydrocarbons."

31  
32     However, applicant wishes to point out that Bertet shows  
33    a heated umbilical means "for the purpose of polymerizing the

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1 perform" - ie, setting up the polymer material that is  
2 primarily used to form a casing. Please see Column 7, lines  
3 26-27 in Bertet. Please also see Claim 12 in Bertet which  
4 states in part: "wherein at least one of the strands of the  
5 sleeve is replaced by electrically conductive wire enabling  
6 the perform to be heated for polymerization purposes,...".  
7 Accordingly, Bertet does not teach, or suggest, using an  
8 electrical heater to prevent waxes and hydrates from forming  
9 within any flowline. Accordingly, applicant respectfully  
10 submits that this is not a "similar umbilical means" as  
11 quoted from the 7/14/2005 Office Action.

12  
13 The prior art references does not contain any suggestion  
14 (express or implied) that they be combined, or that they  
15 be combined in the manner suggested. Bertet provides  
16 "An assembly comprising a radially expandable tubular perform  
17 for casing a well..." as quoted from the first several  
18 lines of Claim 1. Claim 1 is the only independent Claim  
19 in Bertet and it pertains to forming casings in a well.  
20 Bertet does not provide any apparatus that is to be  
21 "installed within a subsea flowline containing produced  
22 hydrocarbons as an immersion heater means to prevent waxes  
23 and hydrates from forming..." as stated in applicant's  
24 Claim 1.

25  
26 Langner et al. describes a permanently installed "pipe-  
27 in-pipe subsea pipeline" (Claim 1 therein) that is  
28 electrically heated by conducting current through the inner  
29 electrically insulated pipe. Langner does not describe  
30 installing an electrically heated umbilical within an already  
31 existing flowline.

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1           Applicant's invention solves a different problem than  
2 the references. Langner et al. teaches a permanently  
3 installed heated pipe-in-pipe subsea pipeline to prevent the  
4 formation of waxes and hydrates. Bertet et al. provides a  
5 new type of casing. Applicant's invention provides a heated  
6 umbilical means which may be retrofitted into an already  
7 existing subsea flowline to prevent the formation of waxes  
8 and hydrates.

9  
10          Therefore, the prior art references does not contain any  
11 suggestion (express or implied) that they be combined, or  
12 that they be combined in the manner suggested.

13  
14          Each of the prior art references is complete and  
15 functional in itself, so there would be no reason to use  
16 parts from, or add, or substitute, parts to any reference.

17  
18          In Bertet, "at least one of the strands of the sleeve is  
19 replaced by electrically conductive wire..." (Claim 12).  
20 Langner shows a "pipe-in-pipe subsea pipeline". Those  
21 skilled in the art would find it physically impossible to  
22 combine the references in the manner suggested. A portion of  
23 the "strands of the sleeve" in Bertet could not replace the  
24 inner current conducting pipe in Langner. It would be  
25 necessary to make modifications, not taught in the prior art,  
26 in order to combine the references in the manner suggested.  
27 Accordingly, applicant submits that Claim 1 is allowable over  
28 Langner in view of Bertet for this reason alone.

29  
30          Further, even if the prior art references were combined,  
31 they would not meet all the features of Claim 1.

32

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1           The invention is classified in a crowded art; therefore  
2 a small step forward should be regarded as significant.

3

4           Accordingly, applicant respectfully submits that Claim 1  
5 is allowable over Langner et. al. and in view of Bertet et  
6 al.

7

8           With respect to Claim 2, Langner shows using an  
9 insulated inner current conducting pipe that is electrically  
10 isolated from an outer pipe to prevent formation of waxes and  
11 hydrates. This is a "pipe-in-pipe" system. In Langner, the  
12 inner pipes are welded together (Figure 7B, column 6, lines  
13 65-66). Then, the outer pipes are welded together (Figure  
14 7C, column 7, lines 15-16). Langner does not teach or  
15 suggest inserting the assembly into an already existing  
16 flowline as claimed by applicant in Claim 2. The 7/14/2005  
17 Office Action states on page 3 with respect to Langner:  
18 "figure 1, considered pre-existing since the claim language  
19 does not preclude manufacturing of the flowline where a  
20 preexisting or built flowline has the conductive outer pipe  
21 attached thereto, inherent to manufacturing." Applicant  
22 respectfully disagrees with this statement which applicant  
23 believes to be erroneous. The assembly process and the welds  
24 explicitly described in Langner precludes retrofitting an  
25 electrically heated interior subassembly into a long outer  
26 pipe that is already in place. Instead, Langner teaches  
27 making the heated flowline itself in one welded piece as  
28 described therein. Accordingly, because Langner fails to  
29 teach or suggest inserting the interior assembly into an  
30 already existing flowline as claimed by applicants in  
31 Claim 2, applicant respectfully submits that Claim 2 is  
32 allowable over Langner in view of Bertet.  
33

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1       With respect to Claim 3, the 7/14/2005 Office Action  
2 states in part: "As concern claim 3, Langner further shows a  
3 method of using an umbilical conveyance means 10 to convey  
4 into an existing subsea flowline....". Applicant wishes to  
5 respectfully point out that element 10 in Langner is the  
6 entire pipe-in-pipe subsea pipeline, and that element 10 is  
7 not described as a conveyance means in Langner. Please refer  
8 to column 3, lines 7-12 of Langner, which state: "Pipeline  
9 10 is shown to be a pipe-in-pipe flowline 30 having an  
10 electrically conductive carrier or outer pipe 32 and an  
11 electrically conductive product flowline or inner pipe 34  
12 arranged longitudinally and substantially concentrically with  
13 the outer pipe." Langner does not suggest putting element 10  
14 into yet another pipeline which would be very expensive and  
15 would not make any sense. For the reasons stated in this  
16 paragraph, and for the reasons above, applicant submits that  
17 Claim 3 is allowable over Langner in view of Bertet.  
18

19       Claim 4 reads closely on Claim 3, except here an  
20 "electrically heated umbilical means" is described. For the  
21 reasons above, applicant submits that Claim 4 is also  
22 allowable over Langner in view of Bertet.  
23

24       Applicant wishes to respectfully point out that he has  
25 responded to every single objection in the Office Action  
26 dated 7/14/2005, and applicant respectfully submits that  
27 Claims 1-4, and 5-6, are in a condition for allowability.  
28

29       Applicant requested a telephone interview with Examiner  
30 on several occasions. Applicant appreciates the telephone  
31 message from Examiner on/about September 8, 2005. Applicant  
32 thereafter tried to reach the Examiner by telephone, but has  
33 been unsuccessful. Therefore, applicant has prepared this

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1 response without the benefit of obtaining answers to certain  
2 questions from the Examiner. If there are errors herein in  
3 substance or format, applicant requests help and assistance  
4 from Examiner to correct those errors. Thank you.

5

6 PAYMENT OF FEES:

7

8 Applicant does not believe any fees are due with this  
9 correspondence. However, if the applicant has made a mistake  
10 on the payment of any fees herein, applicant requests that  
11 any such deficiencies be billed to Account No. 50-0499 that  
12 was established on 3/20/1998. Fees on patents and patent  
13 applications entirely owned, or owned in part, by William  
14 Banning Vail III may be made from this account. William  
15 Banning Vail III is doing business as an inventor under the  
16 name of "Vail's Inventions". Marilyn L. Vail, the wife of  
17 William Banning Vail III, may also direct that fees be paid  
18 from this Account No. 50-0499. If for unforeseen reasons  
19 funds are not available in that account, please let applicant  
20 know as soon as possible and said deficiencies will be paid  
21 immediately. In the event of overpayment of any fees herein,  
22 applicant respectfully requests that any overpayment be  
23 deposited into Account No. 50-0499.

24

25

26 Pro-Se Case

27

28 This case herein is a pro-se case. Therefore, in the  
29 event that the USPTO objects to any, or all of the claims  
30 herein, applicant respectfully requests assistance from the  
31 Examiner under MPEP Section 707.07(j) to draft an acceptable  
32 claim based upon the disclosure and language in the  
33 application.

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1       Further, in the event that the Examiner rejects the  
2 claims, applicant requests that Examiner direct applicant  
3 to the claims closest to allowability, and if possible,  
4 applicant further requests that Examiner preliminarily  
5 mark-up one of said claims in a future office action to  
6 further aid applicant to achieve allowability of at least  
7 one claim in an expeditious fashion.

8

9

10 **DECLARATION:**

11

12       As applicant, I hereby verify that all statements made  
13 herein of my own knowledge are true and that all statements  
14 made on my information and belief are believed to be true;  
15 and further that these statements were made with the  
16 knowledge that willful false statements and the like so made  
17 are punishable by fine or imprisonment, or both, under  
18 Section 1001 of Title 18 of the United States Code and that  
19 such wilful false statements may jeopardize the validity of  
20 the application or any patent issuing thereon.

21

22       This application is filed pro-se. The applicant is  
23 using the book entitled "Patent It Yourself", Eleventh  
24 Edition, by David Pressman, and if there are errors, please  
25 advise the inventor, and such errors will be corrected  
26 immediately.

27

28

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SEP 14 2005

1 Please address all correspondence involving this case to  
2 the co-inventor at the below defined address. Thank you.  
3  
4

5 Very respectfully submitted,  
6  
7

8 William Banning Vail III 9/14/2005  
9  
10 William Banning Vail III Date  
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31 (Note: This is the signature page of the document entitled  
32 "RESPONSE TO OFFICE ACTION MAILED 7/14/2005" for Serial  
33 No. 10/729,509.)

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